



ASX Announcement | 23 August 2024 | ASX: ICG

Update on Exploration Activities

Highlights

- Multiple new and strong targets have been identified across a number of project areas following detailed assessment of the various aerial and ground geophysical datasets that the company has assembled over the past 3 years.
- Mine Management Plans (MMP) have been prepared and submitted to allow for drilling of identified phosphate targets on both the Frewena East and Frewena Frontier tenements;
- Advice has been received from the Northern Land Council that Incas' application for Exploration Licence, EL33604 (Collia South) is compliant with the requirements outlined under section 41(6) of the Land Rights Act and the company can now commence consultations, with the relevant Traditional Owners, during the negotiating period;
- A review of the MaCauley Creek Project (EPM 27124) historical exploration drill results had led to the identification of a prospective area in the central part of the tenement that requires further exploration. The area is defined by strong silicification and haematite alteration as well as secondary copper (malachite and bornite) occurrences.
- Recent field trip to MaCauley Creek was undertaken to assess ability for the construction of access tracks to areas where possible drilling will take place.

Over the last 2 months, the company has undertaken a lot of work preparing for the next round of fieldwork. A critical component has been to carefully review the extensive geophysical data that the company has assembled on its NT projects over the last 4 years. These geophysical results had already been reported (ASX announcements of 22 March 2021, 21 May 2021, 31 May 2021, 8 July 2021, and 14 September 2021). The reassessment of these results is an exhaustive process and is taking considerable time with work already completed for the Frewena Far East (EL 33282) and Jean Elson (EL's 32485 and 32486) project areas, leading to the identification of several new drill targets. However, work is still to be done for the rest of the other tenements which already have geophysical data available for 3D modelling, including Frewena Fable, Frewena East and Frewena Frontier.

The potential targets already generated are summarised in **Appendix 1**, with details of possible drillholes, depths and geophysical intensities of the various targets discussed, along with a brief note on possible nature/characteristics of each of the targets. Based on the data presented in **Appendix 1**, the following targets and drill holes are considered a priority.

(a) Frewena Far East

Several new targets have been identified in the SW part of the tenement. These new targets have been named Jan Margaret. There are a number of targets with moderate geophysical signatures and are worth further consideration but the majority of these are not the immediate priority, although two have moderately strong geophysical signatures and are quite shallow.

The highest priority targets are mostly at Mt Lamb where previous drilling was undertaken in 2022. They are presented in Tabular form in **Table 1**.

Target Number	Target Depth	Top of Target	Gravity	Magnetic
			intensity	intensity
FW220008b*	600	200	0.01 - 0.4g/cc	0.001 - 0.009SI
FW240001#	600	250	0.01 - 0.6g/cc	nil
FW240002	600	200	0.01 - 0.5g/cc	0.001 - 0.02SI
FW240003	700	200	0.01 - 0.4g/cc	0.001 - 0.06SI
MLSW4b	600	150	0.01 - 0.3g/cc	0.001 - 0.01SI
MLSW5	600	250	0.01 - 0.3g/cc	nil

Table 1: Priority drillholes in the Mount Lamb gravity and magnetic trend, Frewena Far East

*This drillhole, FW220008b (Figure 1) is designed to test the centre of a gravity isosurface with intensity of 0.4g/cc, whose edge with a gravity intensity of 0.1g/cc was clipped by drillhole FW220008 in 2022. Although the peak of the system was intersected, FW220008 however, returned a broad zone (about 400m) of pyrrhotite-altered and structurally deformed metasediments hosting polymetallic anomalism in Cu-Pb-Au-Ag-Zn from 237m depth (refer to ASX announcement of 26 October 2022 for more details). Review of drill results and the geophysical datasets suggests that drillhole FW220008 probably passed through a low grade "halo" at the periphery of a high gravity feature, which could be indicative of sulphides.



Figure 1: 3D model of FW220008b relative to FW220008 and proposed FW240001.

This hole (FW240001) is located about 1.8km to the north of FW220008. This drillhole aims to target an extension of the gravity and magnetics features from FW220008. 3D modelling indicates that these gravity anomalies extend closer to the surface where the drillhole collar has been proposed (**Figure 2**).



Figure 2: 3D model of FW240001 showing targeted gravity isosurfaces.

Figure 3 shows the locations of the above targets and drillholes, as well as holes previously drilled in 2022.



Figure 3: Frewena Far East showing location of the newly identified targets and proposed drillholes (black symbols with red outlines) and drillholes completed in 2022 (blue symbols).

(b) Jean Elson

A number of targets have been identified at the larger Kestrel geophysical signature at Jean Elson on EL 32486, previously reported (ASX announcement 6 May 2024). In all, 19 targets have been identified at the Kestrel geophysical anomaly alone. Further work continues to identify other targets at Straw Necked Ibis and Spinifex Pigeon.

Compared to some of the targets identified at Frewena Far East, the gravity readings of the best targets at Jean Elson are lower. However, there is a reason for this and this explains why the moderate gravity targets at Jean Elson are still ranked highly. Gravity signature reflects density and where there are significant lithological variations such as the occurrence of igneous and sedimentary rocks, density contrasts will be higher between the high-density igneous rocks and low-density sedimentary rocks. At Frewena Far East, the rock types are both sediments and igneous rocks which have significantly different densities, leading to the high variability in gravity readings recorded. At Jean Elson, the rock types are essentially all igneous and metavolcanics with limited contrasts in the rock types. In such a situation, even a modest gravity variability can be significant in mapping different rock units, which could be associated with metals.

The highest priority drillholes identified at the Kestrel and Spinifex Pigeon prospects, Jean Elson are presented in **Table 2**.

Target Number	Target Depth	Top of Target	Gravity	Magnetic
			intensity	intensity
JE240011	800	250	0.01 – 0.1g/cc	0.01 – 0.03SI
DH4	700	200	0.01 – 0.1g/cc	0.01 – 0.08SI
JE240007	600	200	0.01 – 0.1g/cc	0.01 – 0.08SI
JE240012	700	150	0.01 – 0.1g/cc	nil
JESP0001	450	150	0.01 – 0.1g/cc	0.01 – 0.18SI
JESP0003	450	100	0.01 – 0.1g/cc	0.01 - 0.1851

 Table 2: Priority drillholes identified within the Kestrel prospect, Jean Elson

Discussion

The above is a summary of just the highest priority targets generated to date at both Jean Elson and Frewena Far East. In all, 35 new targets have already been generated and many more are expected to be generated once the full review of all geophysical datasets, across all the NT tenements, is completed.

Frewena Phosphate Potential

There is considerable phosphate potential on both the Frewena East and Frewena Frontier tenements based on historic data interpretation and identification of sedimentary basin structures similar to those, which host the nearby Avenira phosphate deposit. To fully test the Frewena East and Frewena Frontier basins for phosphate potential, extensive drilling is required. It is proposed that a short drill program only be undertaken at this time with the twin objectives of both confirming the historical drilling at Frewena East and firming up the suggestion of a significant phosphate Exploration Target there, as suggested by ResPot historical data reviews.

Accordingly, the company recently submitted two Mine Management Plans (MMPs) to allow for drilling at both the Frewena East and Frewena Frontier tenements to test this phosphate potential. The revised MMP for Frewena East now allows for the drilling of up to 280 shallow (to 100m) RC holes to determine if any identified phosphate can be converted to a resource. For Frewena Frontier, the MMP will allow initially allow the construction of 45km of access tracks and drilling of 25 drillholes as a first-pass assessment.

Collia South Lithium Tenement, Northern Territory

In late 2023 the company applied for a 20-block tenement situated approximately between 135km and 155km west of the town of Katherine and approximately 230km southwest of Darwin. The tenement application which is in the Daly River region in the Northern Territory covers a historic tin mining area where pegmatites have been recorded and which is considered to have lithium potential.

Historical exploration by Todd River Resources (TRT) in 2017 confirmed the existence of tin and tantalum bearing pegmatites, which were genetically and spatially associated with the Soldiers Creek Granite. It is a differentiated granite forming part of the Allia Creek Suite of peraluminous S-type granites. The pegmatites comprise mostly albite and microcline feldspars, quartz and muscovite. Todd River reported (TRT ASX release 10 November 2017) that sampling at Collia had returned an anomalous lithium sample of 1636ppm Li₂O and samples confirmed that all pegmatite is of the highly prospective LCT (Lithium-Caesium-Tantalum) type. Todd River also took a total of 13 pan concentrate samples at Collia. Most of the Collia pan conc. samples returned highly anomalous rare earth element (REE) values, particularly the light REE. Maximum values of 12200ppm (1.22%) Cerium (Ce), 5930ppm yttrium (Y), 6070ppm lanthanum (La), and 4870ppm neodymium (Nd) were recorded (TRT ASX release 10 November 2017), confirming the potential of this area.

The ground applied for is on Aboriginal freehold land and to secure the ground requires an exploration agreement with the relevant Traditional Owners. Inca formally contacted the Northern Land Council (NLC) which represents the local Traditional Owners, in early January 2024 seeking agreement to commence consultations to secure an exploration agreement for this proposed Exploration Licence. Inca has recently received advice from the NLC that the application for exploration licence EL33604 (Collia South) is compliant with the requirements outlined under section 41(6) of the *Land Rights Act* and the company can now commence consultations, with the relevant Traditional Owners, during the negotiating period. It is the company's' intention to try and secure an exploration agreement as quickly as possible so that exploration can commence on this prospective ground this year.

MaCauley Creek Project, Queensland

The company undertook a recent field trip to the MaCauley Creek project to assess the ability to get a drill rig into the historic workings in the Central area where compelling drill targets have been identified. As well as trying to find suitable access for a drill rig, geological prospecting and pXRF sampling was undertaken around the Western workings (Figure 4) where access was readily secured. **Figure 4** shows the structural controlled nature of mineralisation with copper (largely carbonates as malachite) being confined to fracture and brecciated zones, within highly haematite-altered and silicified granites. The apparent

structural control of mineralisation is reinforced by some of the pXRF sampling of the granite rocks in the immediate vicinity of the Western pit.

Access to the other historical workings in the Central area was not possible as the original tracks to the mines, which were in operation in the early 1900's, have been either massively overgrown or disappeared. As such it is clear that securing access for a drill rig to this area will require the construction of new access tracks, through what is essentially hilly and difficult granite country.



Figure 4: Western Pit showing structural control of mineralisation

A review of past exploration over the MaCauley Project tenements has shown that the Central area workings area has been the subject of extensive historical drilling with multiple holes drilled by both RMA and NQM, (Figure 5). NQM in particular drilled a large number of shallow holes, (about 82 in total), in the late 1990's. The locations of the NQM drill holes at both Siver Prospecting and Mt Long historical workings are presented in **Figure 5**.

Although highly anomalous Silver, Copper, Lead and Zinc intersections were recorded, the specific assay results recorded for these holes cannot be reported. This is largely because historical information such as the analytical methods used, how the drillholes were sampled, etc cannot be found and under current ASX reporting requirements, the assay results recorded cannot be reported. Nethertheless, the fact that extensive mineralisation was

reported across a number of the areas drilled by NQM is considered encouraging and will be used to help plan future exploration activities including drilling and possible IP surveys to determine if there are primary sulphides at depth.



Figure 5:Central Area Workings at Macauley Creek showing location of historical drillholes. Blue symbols drilled by RMA and ed symbols by NQM.

Based on the review of the historical drilling results, as well as more recent field work (mapping and rock chip sampling) undertaken by Inca (ASX announcement 23 February 2023), the Central area is considered a priority area for the next phase of exploration. The two exploration techniques that the company is considering is some shallow RC drilling to further extend the historical drilling and a high-power IP survey with up to 400m resolution below the surface. Execution of this survey would provide clear information as to whether there are primary sulphides at depth that are the source of the numerous abandoned mines and pits dotted across the project area.

This announcement has been authorised for release by the Board of Inca Minerals Limited.

Investor inquiries – Adam Taylor, Chairman - Inca Minerals – (08) 6263 4738

Competent Person's Statement

The information in this ASX announcement that relates to exploration activities for the MaCauley Creek Project in Queensland and Jean Elson and Frewena Far East in the Northern Territory, are based on information compiled by Dr Emmanuel Wembenyui BSC (Hons), MSC Applied Geology and PhD Geochemistry who is a Member of The Australasian Institute of Mining and Metallurgy and The Australian Institute of Geoscientists, MAIG. He has sufficient experience, which is relevant to the exploration activities, style of mineralisation and types of deposits under consideration, and to the activity which has been undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Wembenyui is a fulltime employee of Inca Minerals Limited and consents to the announcement being issued in the form and context in which it appears.

Appendix 1

Summary of geophysical targets identified at Jean Elson and Frewena Far East

Project	Tenement	Tenement Name	Prospect	HoleID	Easting	Northing	Mag Azimuth	Depth	Dip	Gravity signature	Magnetic Signature	Top of Target	Ranking	Comment
Frewena	EL33282	Frewena Far East	Jan Margaret	MLSW3	627530	7829200	145	600	-60	0.01 to 0.02g/cc	0.001 to 0.002SI	250m	1	Strong gravity partially coincident with low magnetics.
Frewena	EL33282	Frewena Far East	Jan Margaret	MLSW2	627530	7826300	355	800	-60	0.01 to 0.2g/cc	0	350m	2	Gravity target, no magnetics. MLSW2 to be drilled if MLSW3 is successful.
Frewena	EL33282	Frewena Far East	Jan Margaret	MLSW1	617760	7827800	290	600	-60	0.01 to 0.3g/cc	0	200m	1	Gravity target offset from low magnetics.
														Discrete strong gravity, strongly coincident with low magnetics. Could still be drilled to 550m rather than 800m.
Frewena	EL33282	Frewena Far East	Jan Margaret	MLSW4b	620525	7830400	200	800	-60	0.01 to 0.3g/cc	0.001 to 0.01SI	250	1	Only drill to 800m if results are good.
Frewena	EL33282	Frewena Far East	Jan Margaret	MLSW9	621600	7825300	320	600	-60	0.01 to 0.1g/cc	Ū.	200	1	Discrete gravity high offset from magnetic anomaly.
Frewena	EL33282	Frewena Far East	Jan Margaret	MLSW5	627450	7830950	140	600	-60	0.01 to 0.3g/cc	0	150	1	Heart-shaped moderate to strong discrete gravity anomaly. No magnetics.
	E1 00000		Marriell and Marthauset	514040004	000400	7044700	100	700		0.014-0.1-1		250		Strong gravity anomaly with zero magnetics. Gravity anomaly extends from same feature that was clipped by EW220008 with birthy elevated CuRb. Zo. An. Au. Provide SEDEX target
Flewena	EL33282		Mount Camb Northeast	P 11240001	035100	7844700	100	700	-00	0.01 to 0.4gros	0			Strong gravity coincident with low magnetics. Low magnetics probably due to pyrrhotite, thus a probable ISCG
Frewena	EL33282	Frewena Far East	Mount Lamb Northeast	FW240002	637850	7841400	300	600	-60	0.01 to 0.5g/cc	0.001 to 0.02SI	200	1	target.
														Strong gravity coincident with weak to moderate magnetics. Weak to moderate magnetics probably due to
Frewena	EL33282	Frewena Far East	Mount Lamb Northeast	FW240003	640600	7844000	300	600	-60	0.01 to 0.6g/cc	0.001 to 0.06SI	200	1	pyrrhotite +/- magnetite, thus probably a hybrid target. ISCG/DCG target.
Erouppo	EI 33393	Emurana Eas East	Mount Lomb Northcost	E14/220008P	020504	7942025	280	800	70	0.01 to 0.4 also	0.001 to 0.00081	200		nigh grawity coincident with low magnetics. Follow-up of FVV220006. Low magnetics probably caused by ownholite
Freuena	EL 22705	Tremental tar East	Ion Mermoret Extended	MI CIAISS	600000	7822200	200	800	-10	0.01 to 0.4g/cc	0.00110-0.00501	200	2	Moderate to strong gravity. No magnetice
Freweria	EL32795		Jan Margaret Extended	MLOWIN	023330	7822200	300	000	-00	0.01 to 0.29/00	0 0014: 0 00001	200	4	Mederate to strong granty, no magnetice.
Frewena	EL32795		Jan Margaret Extended	MLSW12	624100	7822925	300	600	-60	0.01 to 0.2g/cc	0.001 18 0.00251	200	1	Noderate to storig gravity oriset from low magnetics.
Frewena	EL32795		Jan Margaret Extended	MLSW13	623950	7824500	0	600	-60	0.01 to 0.1g/cc	0.001 to 0.006SI	200	2	Discrete gravity anomaly concident with low magnetics. Low magnetics probably due to pyrindute.
Frewena	EL32795		Jan Margaret Extended	MLSW14	624200	7824700	300	600	-60	0.01 to 0.1g/cc	0.001 to 0.006SI	250	1	Discrete gravity anomaly coincident with low magnetics. Low magnetics probably due to pyrmotite.
Freemons	EI 33282	Erewards Ear East	Mount Lamb Northeast	EW/240004	636000	7839600	300	800	-60	0.01 to 0.1a/cc	0.01 to 0.0351	500	2	Deepish target. Coincident gravity and magnetics, woderate magnetics. Could be a mix or phyrmotite and magnetite.
Trementa	LEGGEDE	The works if an East	Mount Camp Nore Cast	1 11240004	000000	1000000	500	000	-00	0.0110-0.19/00	0.0110 0.0001	000	-	Discrete gravity high offset from local magnetics. Possible igneous intrusion, but unikely to be mafic because
Frewena	EL33282	Frewena Far East	Mount Lamb Northeast	FW240005	635200	7842350	140	700	-60	0.01 to 0.3g/cc	0	250	3	mafic intrusion is expected to have at least a low magnetic signature???
Jean Elson	EL32486	Jean Elson	Kestrel North	JE240001	682850	7461600	300	600	-60	0.01 to 0.1g/cc	0	200	1	Moderate gravity offset from low magnetics.
Jean Elson	EL32486	Jean Elson	Kestrel North	JE240002	679200	7461600	300	400	-60	0.01 to 0.08g/cc	0.01 to 0.03SI	150	1	Moderate gravity strongly coincident with low to moderate magnetics
Jean Elson	EL32486	Jean Elson	Kestrel North	JE240003	683750	7461600	300	400	-60	0.01 to 0.03g/cc	0.01 to 0.06SI	150	1	Low gravity coincident with moderate to strong magnetics.
Jean Elson	EL32486	Jean Elson	Kestrel South	JE240004	685900	7456300	90	400	-60	0.01 to 0.07g/cc	0	100	2	Moderate gravity offset from regional magnetics.
Jean Elson	EL32486	Jean Elson	Kestrel Central	JE240005	683850	7457500	110	450	-60	0.01 to 0.08g/cc	0	100	1	Moderate gravity offset from regional magnetics.
Jean Elson	EL32486	Jean Elson	Kestrel Central	JE240006	685800	7458200	130	700	-60	0.01 to 0.08g/cc	0.01 to 0.07SI	300	1	Moderate gravity strongly coincident with moderate magnetics. Good target.
Jean Elson	EL32486	Jean Elson	Kestrel Central	DH2	690525	7455900	45	500	-60	0.01 to 0.08g/cc	0	100	2	woderate gravity onset from regional magnetics.
Jean Elson	EL32486	Jean Elson	Kestrel Central	DH5	690400	7456100	90	500	-60	0.01 to 0.08g/cc	0	100	1	woderate gravity onset from regional magnetics.
Jean Elson	EL32486	Jean Elson	Kestrel Central	JE240008	681350	7460475	300	400	-60	0.01 to 0.05g/cc	0.01 to 0.03SI	100	1	Woderate gravity coincident with low magnetics.
Jean Elson	EL32400	Jean Eison	Sunset Boulevarde	JE240009	690100	7400475	300	400	-60	0.01 to 0.07g/cc	0.0110.0351	100	1	woderate grawty concident with low magnetics.
														Moderate gravity coincident with low magnetics. Drilling this hole deeper to about 800m will take it to a zone of
												150		higher magnetics up to 0.08SL Decision to go deeper than 650m will depend on results. This area has the most
Jean Elson	EL32486	Jean Elson	Kestrel Central	DH1	686550	7458150	235	650	-60	0.01 to 0.08g/cc	0.01 16 0.0451	150	1	coincident gravity and magnetics signature in EL32466.
Jean Eison	EL32400	Jean Eison	Kestrei North	JE240010	001100	7463400	300	400	-60	0.01160.07g/cc	U	150	1	Strong gravity no magnetics. Strong gravity coincident with low magnetics. Drilling deeper goes lowards a zone of higher gravity, thus final
Jean Elson	EL32486	Jean Elson	Kestrel Central	JE240011	685650	7457750	240	800	-60	0.01 to 0.1g/cc	0.01 to 0.03SI	250	1	depth will be determined by results.
														Strong gravity coincident with strong magnetics. Drilling deeper goes towards a zone of higher gravity, thus final
Jean Elson	EL32486	Jean Elson	Kestrel Central	DH4	686650	7457400	300	700	-60	0.01 to 0.1g/cc	0.01 to 0.08SI	200	1	depth will be determined by results.
														Strong gravity coincident with strong magnetics. Unling deeper goes towards a zone of higher gravity, thus final depth will be determined by results. Also a zone of coincident resistivity and chargeability high from GAP. Hole
Jean Elson	EL32486	Jean Elson	Kestrel Central	JE240007	686113	7457370	45	600	-60	0.01 to 0.1g/cc	0.01 to 0.08SI	200	1	was also proposed by RESPOT.
														Strong gravity offset from regional magnetics. Driling deeper goes towards a zone of higher gravity, thus final
Jean Elson	EL32486	Jean Elson	Kestrel Central	JE240012	684500	7457888	45	700	-60	0.01 to 0.1g/cc	0	150	1	depth will be determined by results. Also zone of conductivity and braod VTEM high.
Jean Elson	EL32486	Jean Elson	Kestrel Central	JE240013	685950	7458450	10	600	-60	0.01 to 0.07g/cc	0.01 0.06SI	150	1	Moderate gravity coincident to moderate magnetics.
Jean Elson	EL32486	Jean Elson	Kestrel Central	JE240014	687750	7458000	280	500	-60	0.01 to 0.07g/cc	0.01 to 0.04SI	150	1	Discrete grawty high at the edge of a magnetic high. Partly coincident with magnetics.
Jean Elson	EL32486	Jean Elson	Kestrel North	JE240015	679100	7465700	300	500	-60	0.01 to 0.07g/cc	0.01 to 0.08SI	150	1	Discrite high moderate gravity coincident with high magnetics.
Jean Elson	EL32486	Jean Elson	Sunset Boulevarde	JE240016	692250	7459450	300	600	-60	U.01 to 0.05g/cc	0	150	2	Discrete moderate gravity righ. No magnetics.
Jean Elson	EL32465 FL32485	Jean Elson	Spiniex Pigeon	JESP0001	641750	7462350	260	450	-60	0.01 to 0.15g/cc	0.01 to 0.03SI	100		Strong concident gravity and magnetic anomales.
Jean Elson	EL 32485	Jean Elson	Spinifex Pigeon	JESP0003	644400	7466450	160	450	-60	0.01 to 0.18g/cc	0.01 to 0.1851	100	1	Strong gravity coincident with strong magnetics.